

Co-Rumination Communication Patterns in Friendships and Romantic Relationships

Kimberly K. Assad

Honors Thesis

Advisor: Dr. Richard M. Martin

May 24, 2005

Abstract

Depression is a disease that affects more women than men. One explanation why women are more frequently diagnosed with depression is that they cope with problems differently than men do. One such coping style, co-rumination, is the process of repeatedly talking about one's problems without resolving them. While co-rumination is positively related to the quality of the friendship, it also correlates with higher instances of depression (Rose, 2002). Additionally, past research has found an interaction to exist between gender and relationship regarding co-rumination. Basically, men co-ruminated more with partners whereas women co-ruminated more with friends, though, overall, women significantly co-ruminated more than men did (Assad, 2004; Assad & Haley, 2003). Additionally, previous research has shown that listening behaviors are important factors in determining whether or not the speaker should continue to self-disclose (Reis & Shaver, 1988), and, therefore, may be relevant to co-rumination patterns. The aims of this study were to replicate the results of past findings on co-rumination, to examine gender differences in nonverbal and verbal listening skills, and to examine the degree to which dyad's co-rumination scores correlated. Participants consisted of 96 undergraduates at a small, liberal arts college. Data was collected through 3 videotaped conversations (neutral, negative, and positive) and through a questionnaire. Among the results, the data partially replicated past findings. Additionally, there was found to be a significant interaction between gender and relationship type regarding listening behavior, $F(1, 92) = 8.97, p = .004$.

Co-Rumination Communication Patterns in Friendships and Romantic Relationships

After age 13, significantly more girls than boys are diagnosed with depression (Nolen-Hoeksema, 2001). Many theories exist on why depression is consistently found more frequently in women than in men, which include differences in biological hormones, social and economic stresses, and coping styles (Nolen-Hoeksema, 2001).

Coping styles may influence depression because they determine if individuals respond to problems productively or destructively. Rumination, or “coping with negative mood that involves self-focused attention” (Treyner, Gonzalez, & Nolen-Hoeksema, 2003) is one type of coping mechanism that has been positively linked to depression (Nolen-Hoeksema, 2001; Nolen-Hoeksema, Parker, & Larson, 1994; Treyner et al., 2003). Nolen-Hoeksema et al. (1994) has suggested that, because rumination is the tendency to dwell on problems without resolving them, it may inhibit the ability to find solutions to these problems, which in turn perpetuates a depressed state.

Amanda Rose (2002) found a particular type of rumination, co-rumination, to be more strongly present in female than in male friendships. Co-rumination is the act of “extensively discussing and revisiting problems, speculating about problems, and focusing on negative feelings.” The difference between rumination and co-rumination is that co-rumination is social while rumination is not. While rumination only involves inward reflection on problems, co-rumination includes outwardly vocalizing these problems to another person. Rose (2002) conducted a study to examine the differences between boys and girls (children in the 3rd and 5th grades, and adolescents in the 7th and 9th grades) in the amount of co-rumination each group exhibited in same-sex friendships. Rose (2002) found that girls reported co-ruminating significantly more than boys in both childhood and early adolescence. Furthermore, while boys’

co-rumination patterns remained the same with age, adolescent girls co-ruminated significantly more than younger girls. Interestingly, this increase in co-rumination behaviors appeared at the same age in which Nolen-Hoeksema (2001) first found higher levels of depression to start appearing in girls relative to boys. Because of this gender difference, Rose (2002) hypothesized that co-rumination may be a factor leading to depression in women.

Additional co-rumination research has been conducted on college populations (Assad, 2004; Assad & Haley, 2003). In addition to extending Rose's (2002) findings to a college population, the investigators examined co-rumination in heterosexual romantic relationships. Both studies found that there was a significant interaction between relationship and gender (Assad, 2004; Assad & Haley, 2003). While women co-ruminated significantly more than men overall, women were found to co-ruminate significantly more with friends than with partners, whereas men were found to co-ruminate significantly more with partners than with friends.

However, one limitation of the previous research on co-rumination is that the data was gathered using questionnaires. While individuals reported these co-rumination patterns, this does not mean that they would actually display these patterns while communicating. Moreover, all of this data was collected from only half of the dyad. Past research did not investigate whether both partners had similar perceptions about the amount of co-rumination in their relationships, nor did past research investigate the importance of the listener in regards to co-rumination.

While there has not been any research on listening behaviors involved with co-rumination, numerous studies have investigated the importance of the listener in conversations. For example, the listener is an essential component to the conversation because s/he shows the speaker that s/he is being understood (Leaper, Carson, Baker, Holliday, & Myers, 1995).

Furthermore, Reis and Shaver (1988) argued that the listener is actually more essential to the conversation than the speaker because, by interpreting how the listener responds to disclosed topics, the speaker is able to interpret whether or not s/he is being understood. Additionally, Guerro (1997) examined the nonverbal behaviors of facial pleasantness, smiling, and vocal pleasantness in friendships and romantic partners. Interestingly, Guerro (1997) found a pattern similar to the interaction between gender and relationship found in co-rumination behavior patterns (Assad, 2004; Assad & Haley, 2003). Basically, men were significantly better nonverbal listeners toward their partners than toward their friends, whereas women were significantly better nonverbal listeners toward their friends than toward their partners (Guerro, 1997).

The previous research regarding rumination, co-rumination, and listening behaviors lead to three main purposes of the current study. First, a replication of Assad's (2004) and Assad and Haley's (2003) study were conducted on co-rumination patterns. Second, listening behavior patterns were examined through videotaped conversations in order to both replicate Guerro's (1997) findings and to extend them to verbal behaviors. Finally, the co-rumination scores of individuals in the same dyad were correlated to determine if both participants viewed their relationship similarly. The current study examined 8 hypotheses:

1. Rumination scores will significantly correlate with depression scores.
2. Overall, women will co-ruminate significantly more than men.
3. Women will co-ruminate significantly more with friends than with partners.
4. Men will co-ruminate significantly more with partners than with friends.
5. Overall, women will be significantly better listeners than men.
6. Women will be significantly better listeners toward friends than toward

- partners.
7. Men will be significantly better listeners toward partners than toward friends.
 8. The co-rumination scores from each member of a dyad will significantly correlate.

Method

Participants

Ninety-six participants (48 women, 48 men) participated in this experiment for extra credit (if they were enrolled in General or Developmental Psychology) and a chance to win 25 dollars. Most of the participants were students at a small, liberal arts college in Minnesota, with 2 participants being high school seniors. Participants were tested in dyads, with 16 dyads consisting of opposite-sex romantic partners, 16 dyads consisting of same-sex female best friends, and 16 dyads consisting of same-sex male best friends.

Measures

Conversations Questionnaire. The Conversations Questionnaire (Appendix A) collected demographic information and assessed participant's feelings about both the conversations they participated in that day and about their feelings regarding conversations with their partners in general. Questions included items about how often participants discussed problems/positives in their relationships, how these conversations made them feel, their perceptions of both their and their partner's listening skills, what they would change about communication within their relationship, and how similar the conversations were to their typical conversations.

Coding of conversations. The conversations were rated on several different measures. The listener for each conversation was rated on both verbal and nonverbal measures using 7-point Likert scales (Appendix B). The measures rated included boredom/attention (nonverbal),

rejection/affirmation (nonverbal), boredom/attention (verbal), and negative/positive feedback (verbal). The boredom/attention (nonverbal) category coded for such behaviors as eye contact, leaning forward, and crossing of the arms. The rejection/affirmation (nonverbal) category consisted of measuring behaviors such as smiling or frowning. The boredom/attention (verbal) category included responses such as asking questions, elaboration, and not responding. Finally, the negative/positive feedback (verbal) category measured the listener's tone, such as by measuring sarcasm or positive affirmation. These variables were tested for interrater reliability by comparing the ratings of 56 coded responses from 2 different raters. The rater's scores were correlated, and the average of these correlations was computed to obtain interrater reliability, $R = .229$, $p = .095$. While the overall correlation was not significant, it was close to being significant. Additionally, since only 56 out of 384 possible variables were included in this analysis, the interrater reliability may improve after including correlations of more data points.

Procedure

Before starting the experiment, one participant was asked to be "Subject A" and the other was asked to be "Subject B." The labels were randomly assigned in the romantic partner dyads so that half of the men and half of the women would be "Subject A."

Participants were then seated at a table across from each other. Next, participants signed a consent form and were given instructions by the experimenter. Participants were told they would participate in 3 conversations, all of which would be videotaped. For the first conversation, participants told each other about their days. Next the participants took turns discussing a problem that had happened sometime between the beginning of the school year and the experiment. Finally, participants took turns discussing something positive that had happened between the beginning of the school year and the time of the experiment. For each conversation,

the experimenter left the room, and then knocked on the door to warn the participants that she was going to give them the next set of instructions.

The first conversation lasted for 5 minutes and was unstructured. For the second conversation, the participants were told they should first discuss one of “Subject A’s” problems and would be told by the experimenter when to discuss one of “Subject B’s” problems. Participants discussed “Subject A’s” problem and “Subject B’s” problem for 5 minutes each. A similar procedure was used to discuss participant’s positive experiences, the only difference being that the order was reversed so that “Subject B” had the opportunity to discuss a positive before “Subject A” did. Although participants were focused on only one individual’s problem or positive at a time, both individuals were allowed to talk during all parts of the discussion.

After the last conversation, the video-recorder was turned off, and “Subject B” was asked to move to the opposite end of the room. Participants then completed a questionnaire consisting of the Conversations Questionnaire, the Co-Rumination Questionnaire (Rose, 2002), the Friendship Quality Questionnaire (Parker & Asher, 1993), the Depression Scale (Treyner, et al., 2003), and the CES-D Scale (Radloff, 1977). When both participants were finished completing the questionnaires, they were thanked and debriefed.

Results

Co-rumination and depression

Both measures of depression, the CES-D Scale (Radloff, 1977) and Treyner et al.’s (2003) Depression Scale, were correlated with both measures of co-rumination. The Depression Scale was significantly correlated with Rose’s (2002) Co-Rumination Questionnaire, $R = .25$, $p = .019$, and was marginally significantly correlated with the Conversations Questionnaire, $R = .20$, $p = .054$. Additionally, the CES-D Scale was significantly correlated with the Depression Scale,

$R = .77, p < .001$. Furthermore, the Conversations Questionnaire and the Co-Rumination Questionnaire were almost significantly correlated, $R = .21, p = .051$. While the CES-D Scale did not significantly correlate with either measure of co-rumination overall, it did significantly correlate with the co-rumination scores of romantic partners on the Conversations Questionnaire, $R = .62, p < .001$.

Co-rumination replication

A univariate Analysis of Variance (ANOVA) was used to assess the co-rumination variables. In regards to rumination, there was a marginally significant finding that women ruminated more than men, $F(1, 91) = 3.60, p = .06$. Moreover, in regards to individual variables, the only one that revealed a significant gender difference was that men speculated more on consequences of the problem than did women, $F(1, 90) = 4.47, p = .037$. While there was not a significant gender difference when all of the variables were combined into an overall co-rumination variable, there were significant interactions between gender and relationship for many of the individual variables (see *Table 1*) and an overall interaction in which men co-ruminated significantly more with partners than with friends and women co-ruminated significantly more with friends than with partners, $F(1, 85) = 11.17, p = .001$ (see *Figure 1*).

Table 1. Significant interactions between gender and relationship on Rose's (2002) Co-Rumination Questionnaire measures.

Variable	<i>F</i> – value	<i>p</i> – value	Interaction (M = men, W = women, R = romantic relationship, F = friendship)
Frequency discussing problems	9.27	.003	M > R, W > F
Frequency encourage other to discuss problems	7.88	.006	M > R, W > F
Frequency other encourages discussion of problems	13.46	< .001	M > R, W > F
Repeated discussion of problems	6.45	.013	M > R, W > F
Speculation on causes of problems	8.08	.006	M > R, W > F
Speculation on consequences of	4.12	.045	No difference M, W > F

problems			
Speculation on parts of the problem that are not understood	5.80	.018	M > R, W > F

Overall Co-Rumination Scores on the Co-Rumination Questionnaire (Rose, 2002)

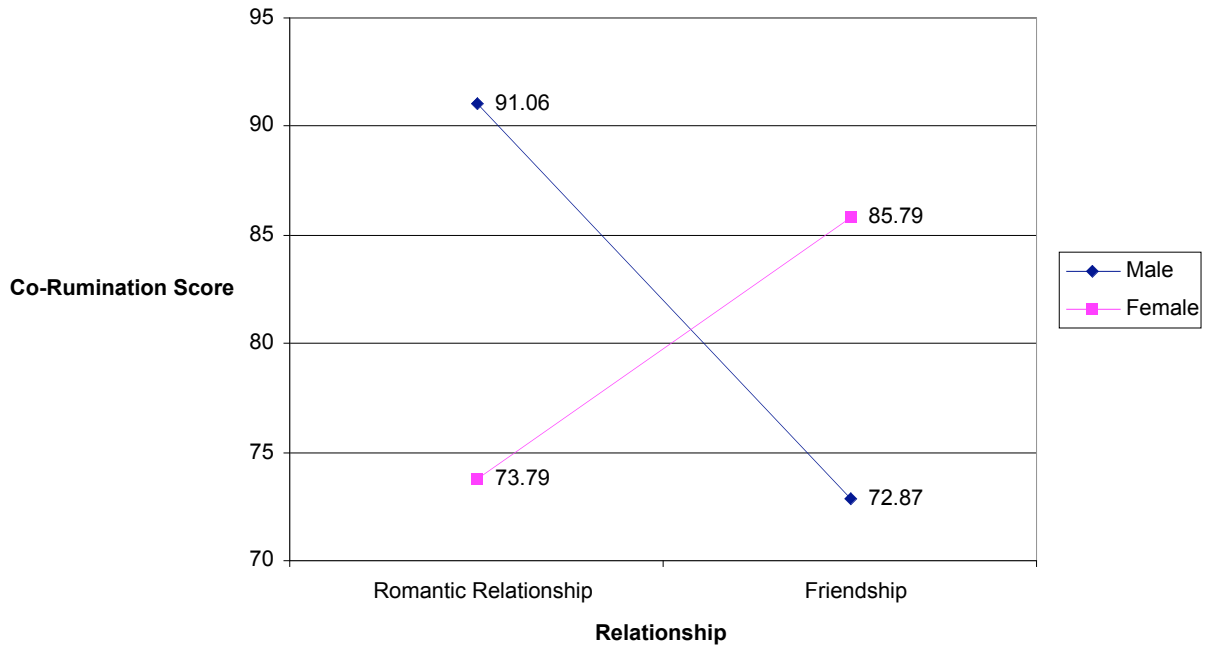


Figure 1. Interaction between gender and relationship type on co-rumination scores.

Additional co-rumination findings

Additionally, the data obtained from the Conversations Questionnaire were assessed using a univariate ANOVA. Using this questionnaire, women were found to significantly co-ruminate more than men, $F(1, 91) = 9.86, p = .002$ (see *Figure 2*).

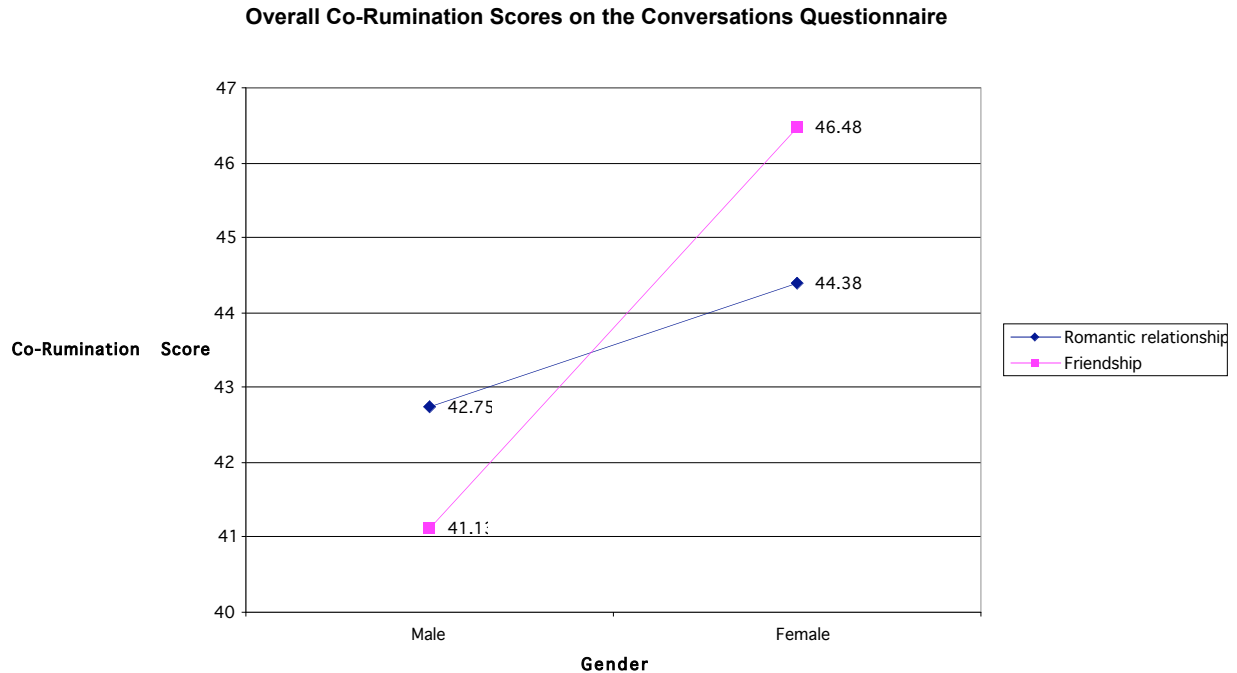


Figure 2. Interaction between gender and relationship type on overall co-rumination scores using the Conversations Questionnaire.

Additionally, using this data, there were significant differences regarding gender, relationship type, and the interaction between the two on specific variables (see *Table 2*).

Table 2. Significant relationships on Conversations Questionnaire variables.

Variable	Significance	Who does it more? (M = men, W = women, R = romantic relationship, F = friendship)
Who talks more about problems	Gender* Interaction*	Men say other more M > R, W > F
How often do you discuss your problems	Gender* Relationship* Interaction*	Women Romantic M > R, W = no difference

How often do you discuss your partner's problems	Relationship* Interaction*	Romantic M > R, W > F
After discussing problems, I feel distant/close to partner	Gender (.051) Relationship (.072)	Women Friends
After discussing problems, I feel upset/happy with partner	Relationship* Interaction (.064)	Friends No difference M, W > F

* Indicates $p < .05$

Listening behavior

A univariate ANOVA was used to assess both nonverbal and verbal listening behaviors. In regards to the nonverbal boredom/attention variable, there was a significant interaction between gender and relationship in which women paid significantly more attention to friends than to partners, whereas men paid significantly more attentions to partners than to friends, $F(1, 92) = 4.08, p = .046$. Additionally, regarding the nonverbal rejection/affirmation variable, friends were affirmed more often than were partners, $F(1, 92) = 8.04, p = .006$. Likewise, there was significant interaction for this variable. While there was no difference between men's scores in both types of relationships, women affirmed their friends significantly more than their partners, $F(1, 92) = 4.03, p = .048$.

Additionally, while there were no significant findings concerning the verbal boredom/attention variable, there were some significant results in regards to the verbal negative feedback/positive feedback variable. While there were no overall significant gender differences, there was once again a significant difference regarding relationship type. Friends received significantly more positive feedback than did romantic partners, $F(1, 92) = 19.50, p < .001$. Additionally, there was a significant interaction between gender and relationship. While there was not a significant difference between males' relationship types, women gave more positive feedback to their friends than to their partners, $F(1, 92) = 9.74, p = .002$.

Overall, when the listening variables were combined into one variable (overall listening skills), there were two significant findings. First, overall, people were better listeners toward

their friends than toward their partners, $F(1, 92) = 5.72, p = .019$. Additionally, there was a significant interaction between gender and relationship. While men listened equally well in both relationships, women were better listeners toward their friends than toward their partners, $F(1, 92) = 8.97, p = .004$ (see *Figure 3*).

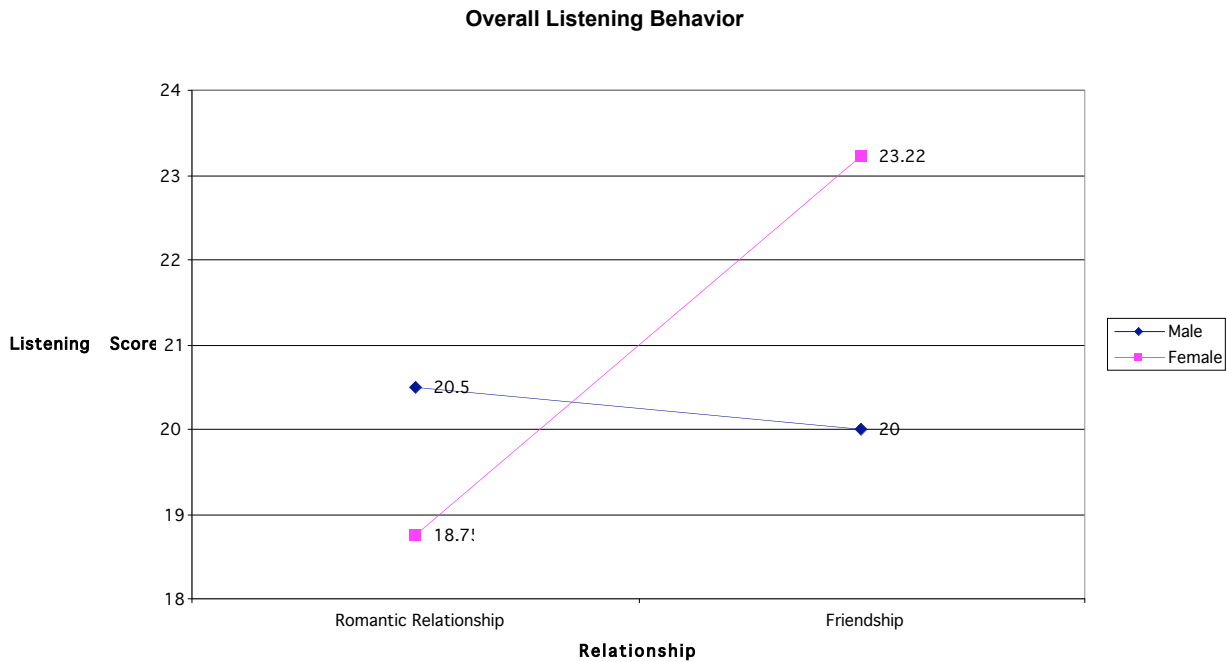


Figure 3. Interaction between gender and relationship type for overall listening scores (both verbal and nonverbal).

Correlations

Overall, there were no significant correlations between members of the same dyad when all groups were assessed together. However, when each group was assessed separately, there were some significant findings.

There were 3 variables of interest regarding romantic partners. First, partners were almost significantly likely to spend equal amounts of time speculating on the consequences of problems, $R = .35, p = .052$. Additionally, partners were equally likely to spend time focusing on

negative feelings, $R = .45, p = .010$. Finally, the ability of partners to give nonverbal rejection/affirmation was marginally significant, $R = .33, p = .062$.

The one co-rumination measure that was marginally significant among female friends was that female friends agreed on the frequency in which they discussed their problems instead of participating in other activities, $R = .35, p = .051$. Additionally, female friends were likely to have similar depression scores to their friends, both on the CES-D Scale (Radloff, 1977), $R = .39, p = .035$, and on Treynor et al.'s (2003) Depression Scale, $R = .38, p = .034$.

Finally, the male friends' scores were marginally significantly correlated on two co-rumination variables that involved speculation. First, male friends tended to agree on the amount of time they speculated on the consequences of problems, $R = .33, p = .065$. Additionally, male friends tended to agree on the amount of time they speculated on parts of the problem that were not understood, $R = .34, p = .054$.

Discussion

Hypothesis 1 predicted that depression scores would significantly correlate with co-rumination scores. This was partially supported. While both co-rumination measures significantly correlated with the depression scale (Treynor et al., 2003), neither measure correlated with the CES-D Scale (Radloff, 1977). However, it should be noted that the Depression Scale and the CES-D Scale did almost significantly correlate. Since there is still data in support of the finding that co-rumination and depression are correlated, and since both measures of depression were significantly correlated, it is possible that significant correlations would have been found using the CES-D Scale and the overall co-rumination measures if a larger sample had been used.

Hypothesis 2 stated that women would significantly co-ruminate more than men. However, this was only partially supported. While women significantly co-ruminated more than men based on the co-rumination measures used in the Conversations Questionnaire, no significant gender differences were observed using Rose's (2002) Co-Rumination Questionnaire. There are several explanations for why there was such a discrepancy between the Conversations Questionnaire and the Co-Rumination Questionnaire. First, it is possible that the Conversations Questionnaire asked questions that were more direct when targeting aspects of co-rumination than those asked by the Co-Rumination Questionnaire. However, this is unlikely because previous studies have found a significant gender difference in co-rumination using the Co-Rumination Questionnaire (Assad, 2004; Assad & Haley, 2003, Rose, 2002). It is also possible that, since the Conversations Questionnaire asked questions about the conversations in which the dyad had just participated, the conversations of the day may not have been reflective of the dyad's typical conversations. Furthermore, since previous studies used a larger number of participants, this may have allowed less drastic differences to be seen as significant in previous studies. Finally, the reason why the results of past studies using the Co-Rumination Questionnaire may not have been replicated could be due to assessing scores of the other person. Since friends and partners must be selected by the individual, there may have been a confounding variable that could have influenced participants' scores.

Hypothesis 3 predicted that women would co-ruminate significantly more with friends than with partners, while hypothesis 4 predicted that men would significantly co-ruminate more with partners than with friends. This interaction pattern between gender and relationship type was found to be significant when using both the Conversations Questionnaire and the Co-Rumination Questionnaire.

Hypothesis 5 stated that, overall, women would be significantly better listeners than men. Hypothesis 5 was not supported. This is an important finding because the media often portrays men as being poorer listeners than women. However, even if men are believed to be poor listeners, this is not the case when they are actually communicating. While no significant gender differences were found, it is important to note a few limitations of this finding. First, men may have been better listeners because they were in an experimental setting. The presence of a video-recorder may have caused them to behave differently than they would have if this was a conversation in a naturalistic setting. Additionally, the relationships that were examined included 2 very central relationships: best friends and romantic partners. Gender differences may have surfaced if different types of relationships that were not as important to the participant had been studied (i.e. acquaintances, strangers). It should also be noted that there might be a significant difference between people that are able to obtain these types of close relationships. Perhaps men that are better than average listeners are more likely to have best friends and romantic partners than those men that are poor listeners.

Hypothesis 6 predicted that women would be significantly better listeners toward friends than toward partners, while hypothesis 7 predicted that men would be significantly better listeners toward partners than toward friends. While hypothesis 7 was not supported since, overall, there was not a significant difference between the listening skills of male friends and male partners, hypothesis 6 was supported. Women were better listeners toward their friends than toward their partners. Thus, while the interaction pattern did not resemble the pattern found by Guerro (1997), there was a significant interaction between gender and relationship. It should be noted that this difference might have occurred if the men were made more self-conscious by the video-recorder than the women were. However, this difference is unlikely to reflect why the

current study's results did not mirror Guerro's (1997) findings since Guerro also had used video-recorded data.

Finally, hypothesis 8 predicted that the co-rumination scores from each member of a dyad would significantly correlate. While this hypothesis was not supported when all of the dyads were assessed together, when each group was assessed separately, some significant results did surface. However, even when examining the correlations of dyads within each group, most of the variables were not significantly correlated. Overall, hypothesis 8 was not supported, though it should be noted that some dyads did correlate more strongly than did others. It would be really interesting to conduct a longitudinal study in which partners and friends were assessed to see if those dyads that had significantly correlated co-rumination scores were more likely to last over time.

While most of the correlational findings were not significant, the finding that the depression levels of female friends were significantly correlated should be further examined. For example, depressed women may gravitate toward other depressed women, following the thought that misery loves company. However, it is also possible that less depressed women do not want to be friends with more depressed women. Finally, another explanation could be that over time, one depressed woman may make her friend also become more depressed. This explanation may further suggest that co-rumination is tied to depression if an increase in co-rumination would be responsible for why this change occurs over time.

Overall, this study did show that there are significant interactions between gender and relationship type regarding both co-rumination and listening skills. However, there were some limitations of this study, in addition to those that have been previously mentioned. For example, while listening behaviors were assessed, this study did not attempt to examine the role of the

speaker. The data should be recoded for types of disclosures from the speaker in order to examine both how these behaviors correlate with different listening patterns, and also to examine to what extent both participants voluntarily co-ruminate when they are discussing one of their own topics. Additionally, it would be interesting to examine the positive conversations that were recorded. This would provide insight into how much men and women differ in their positive conversations. If men and women differ in their negative conversations, but not in their positive conversations, this would help deliver an explanation for why depression is more prevalent in women than in men.

Furthermore, it should be noted that in past co-rumination studies, women and men were told to assess both their friendships and their romantic relationships (Assad, 2004; Assad & Haley, 2003). However, this process was not continued in the current study. While it would have been more difficult for individuals to come to the lab with both a partner and a friend, it would have been interesting to examine the differences with how an individual acted toward his or her partner when compared with how he or she acted toward his or her friend. This may also explain why the results of past studies were not completely replicated (Assad, 2004; Assad & Haley, 2003). If past studies compared results from the same individuals, whereas this study did not, it is likely that the results would have been replicated if the same individuals were assessed with both their romantic partners and with their best friends.

The current study raises several questions that can be applied to future research. For example, since the current study examined co-rumination communication patterns in same-sex best friends and in opposite-sex romantic partners, a confounding variable was created between gender and relationship type. There would be several ways to eliminate this confound through assessing homosexual couples and opposite-sex friends. For example, if an opposite-sex friend

group and a same-sex friend group were studied, the only variable examined would be gender. Likewise, if homosexual partners and same-sex friends were examined, the only variable would be relationship type.

Additionally, the current research has an applied application. By working with a clinically depressed population to change their communication patterns so that clients reduce the amount of time they spend co-ruminating, it may be possible to decrease depression levels. However, while it is unclear whether co-rumination causes depression, depression causes co-rumination, or if there is another confounding variable, this technique may help determine if there is indeed a causal relationship between co-rumination and depression.

Acknowledgements

Special thanks to Dr. Richard M. Martin for all of his help and support throughout the progress of this project. Additional thanks to Jo M. Ellison for her help with the reliability coding.

References

- Assad, K. K. (April, 2004). *Co-rumination in friendships and romantic relationships over time*. Paper presented at the National Conference on Undergraduate Research, Indianapolis, IN.
- Assad, K. K., & Haley, M. (April, 2003). *Co-rumination in romantic relationships*. Poster presented at the Minnesota Undergraduate Psychology Conference, Minneapolis, MN.
- Guerro, L. K. (1997). Nonverbal involvement across interactions with same-sex friends, opposite-sex friends, and romantic partners: Consistency or changes? *Journal of Social and Personal Relationships, 14*(1), 31-58.
- Leaper, C., Carson, M., Baker, C., Holliday, H., & Myers, S. (1995). Self-disclosure and listener verbal support in same-gender and cross-gender friends' conversations. *Sex Roles, 33*(5-6), 387-404.
- Nolen-Hoeksema, S., Parker, L. E., & Larson, J. (1994). Ruminative coping with depressed mood following loss. *Journal of Personality and Social Psychology, 67*(1), 92-104.
- Nolen-Hoeksema, S. (2001). Gender differences in depression. *Current Directions in Psychological Science, 10*(5), 173-176.
- Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*(4), 611-621.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385-401.

- Reis, H. T., & Shaver, P. R. (1988). Intimacy as an interpersonal process. In Laurenceau, J. P., Barret, L. F., & Pietromonaco, P. R. (1998). Intimacy as an interpersonal process: The importance of self-disclosure, partner disclosure, and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality and Social Psychology, 74*(5), 1238-1251.
- Rose, A. J. (2002). Co-rumination in the friendships of girls and boys. *Child Development, 73*(6), 1830-1843.
- Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research, 27*(3), 247-259.

Appendix A: Conversations Questionnaire

Part I: Demographic Information

1. Gender: Male Female
2. Year in college: 1 2 3 4
3. Age: _____

Part II: Questions about the conversation about problems

Please circle what answers best describe your feelings.

1. Who talks more about their problems?
Always Me 1 2 3 4 5 6 7 Always Partner
2. How often have you discussed your problems with your partner in your relationship?
Never 1 2 3 4 5 6 7 Always
3. How often have you discussed your partner's problems in your relationship?
Never 1 2 3 4 5 6 7 Always
4. After discussing problems with my partner I feel...
Upset 1 2 3 4 5 6 7 Happy
5. After discussing problems with my partner I feel...
Distant 1 2 3 4 5 6 7 Close
6. Do you feel free to discuss everything you want to with your partner about problems?
No 1 2 3 4 5 6 7 Yes
7. Do you feel that your partner listens to you about your problems?
No 1 2 3 4 5 6 7 Yes
8. Do you feel that you listen well to your partner about your partner's problems?
No 1 2 3 4 5 6 7 Yes
9. If you could change anything about how you communicate with your partner about problems, what would it be and why?
10. Was today's conversation about problems similar to how you and your partners discuss problems in everyday life?
No 1 2 3 4 5 6 7 Yes
11. How was today's conversation about problems different?

Part III: Questions about the conversation about positives

Please circle what answers best describe your feelings.

1. Who talks more about their positives?
Always Me 1 2 3 4 5 6 7 Always Partner
2. How often have you discussed your positives with your partner in your relationship?
Never 1 2 3 4 5 6 7 Always
3. How often have you discussed your partner's positives in your relationship?
Never 1 2 3 4 5 6 7 Always
4. After discussing positives with my partner I feel...
Upset 1 2 3 4 5 6 7 Happy
5. After discussing positives with my partner I feel...
Distant 1 2 3 4 5 6 7 Close
6. Do you feel free to discuss everything you want to with your partner about positives?
No 1 2 3 4 5 6 7 Yes
7. Do you feel that your partner listens to you about your positives?
No 1 2 3 4 5 6 7 Yes
8. Do you feel that you listen well to your partner about your partner's positives?
No 1 2 3 4 5 6 7 Yes
9. If you could change anything about how you communicate with your partner about positives, what would it be and why?
10. Was today's conversation about positives similar to how you and your partners discuss positives in everyday life?
No 1 2 3 4 5 6 7 Yes
11. How was today's conversation about positives different?

Appendix B: Video-Coding Variables

Conversation Number: Problem/Positive A/B Speaking M/F Speaking

Non-Verbal Scales

- | | | |
|---|---------------|--|
| 1. Boredom/disinterest
(no eye contact, play w/ objects) | 1 2 3 4 5 6 7 | Consistent attention
(eye contact, leaning forward) |
| 2. Rejection
(frowning, shaking head) | 1 2 3 4 5 6 7 | Affirmation
(nodding, smiling, laughing) |

Verbal Scales

- | | | |
|---|---------------|--|
| 1. Boredom/disinterest
(changing subject, no response) | 1 2 3 4 5 6 7 | Consistent attention
(ask questions, repeat info) |
| 2. Negative feedback
(sarcasm, disagree, rejection) | 1 2 3 4 5 6 7 | Positive feedback
(affirming comments) |

Nature of Problem/Positive:

Who initiated: A/B

Feelings expressed:

Anger Frustration Worry Fear Sadness Depression Homesickness Loneliness Jealousy Joy

Excitement Contentment Love Hopefulness Pride Relief Joking

No emotion

Time spent on issue:

Time A talked:

Time B talked: